

# National Engineering Research Center of Light Alloy Net Forming

## Materials Science and Engineering

### • About the Lab •

With the authorization by Chinese State Development and Planning Commission, National Engineering Research Centre of Light Alloy Net Forming (NERC-LAF) was established in March, 2000 in Shanghai Jiao Tong University. NERC-LAF is an important research base for the research on magnesium alloy, precision forming technology, prototyping and personnel training. The research field is material science, liquid forming, plastic forming and surface corrosion prevention mainly with respect to magnesium alloy. Now NERC-LAF has the ability of basic research, applied research and product development of magnesium alloy, promoting its wider application.

### • About the Team •

**Prof. Wenjiang Ding**, Academician of Chinese Engineering Academy, Director of National Engineering Research Center of Light Alloy Net Forming, Shanghai Jiao Tong University.

**Prof. Qudong Wang**, in Light alloys and their forming technology.

**Prof. Liming Peng**, in Light alloys and their forming technology.

**Prof. Xiaoqin Zeng**, in Mg-based energy materials.

**Prof. Guangyin Yuan**, in Mg-based biomaterials.

NERC-LAF have a fixed R&D team of 30 researchers, including 10 professors, 8 associate professors, 14 staffs with a doctor's degree, 45 PhD and mater students, is employing 50 engineers and technicians, and also 250 skilled workers. Now the research group is named as an Innovative Research Team of Chinese Ministry of Education, an Innovative Research Team of Chinese Ministry of Science and Technology and a Military Innovative Research Team about magnesium alloy. In the past 5 years, NERC-LAF has gotten more than 50 research projects from the central and local government, and more than 30 research projects from the domestic and foreign enterprises. The research Funding amounts to 80 million RMB. NERC-LAF has published 500 papers, of which 300 is cited by SCI, and applied 200 patents, of which 100 has been authorized. 50 and 100 students have been conferred a doctor's degree and master's degree. NERC-LAF has obtained 3 scientific and technological award from the central government and 14 awards from local government. Also NERC-LAF has established a good cooperative relationship with some famous domestic and foreign enterprises and research institutions.

### • Research Fields •

- Research and development on Al alloys with high properties
- Research and development on Mg alloys with high properties
- Casting technology of light alloys
- Plastic deformation technology of light alloys
- Microstructure characterization of light alloys
- Severe Plastic deformation of Al and Mg alloy materials
- Mg-based Biomaterials
- Mg-based Energy Materials

### • Responsibility •

Research, experiment and seminar and so on

### • Eligibility •

- Be in their second or third year of undergraduate study

- Hold at least a 2.5 GPA on a 4.0 scale
- Students of non-English speaking countries must provide English language proficiency certificate, IELTS no less than 6.0, and TOEFL no less than 90 points. If you are in the college for English teaching programs, please provide relevant certificates.
- Have at least one prior research experience
- Undergraduate majoring in materials science and engineering or correlative fields
- Strong interesting in materials research and development
- Stay 6-10 weeks

---

• Additional Financial Support •

N/A

---

• Contact •

Person in Charge: Prof. Qudong Wang, +86-21-54742715, wangqudong@sjtu.edu.cn